

What is claimed is:

1. A composition for use as an additive for fuels or lubricants comprising a reaction product of a treated amine and a compound selected from the group consisting of hydrocarbyl succinic anhydrides, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups, copolymers of unsaturated acids and polyolefins, and acid or ester functionalized hydrocarbon polymers, wherein the reaction product is oil soluble and has a number average molecular weight ranging from about 900 to about 50,000 as determined by gel permeation chromatography, and wherein the treated amine comprises an aliphatic or aromatic amine containing at least one primary or secondary amino group reacted with acrylonitrile or at least one homologue thereof, followed by reduction to the primary amine.

2. The composition of claim 1, wherein the aliphatic or aromatic amine is reacted with one to five equivalents of acrylonitrile or one of its homologues, followed by reduction of the primary amine per primary or secondary amino group in the amine.

3. The composition of claim 1, wherein the amine is a substantially linear aliphatic amine.

4. The composition of claim 1, wherein the amine is an aromatic amine.

5. The composition of claim 1, wherein the reaction product comprises a hydrocarbyl-substituted succinimide derived from the treated amine and a hydrocarbyl-substituted succinic acid having a ratio of succinic acid to treated amine ranging from about 0.3:1.0 to about 12.0:1.

6. The composition of claim 1, wherein the reaction product comprises Mannich adducts derived from hydrocarbyl-substituted phenols, formaldehydes and treated amines.

7. The composition of claim 1, wherein the reaction product comprises a product derived from an ethylene-propylene copolymer and the treated amine.

8. The composition of claim 1, wherein the reaction product further comprises an untreated amine selected from the group consisting of aliphatic amines and aromatic amines.

9. A lubricant composition comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the composition of the reaction product of claim 1.

10. A vehicle having moving parts and containing a lubricant for lubricating the moving parts, the lubricant comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition, of the reaction product of claim 1.

11. An additive package for lubricants or fuels comprising a reaction product of claim 1 and a composition selected from the group consisting of hydrocarbyl succinic anhydrides reacted with an amine, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes and amines, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups reacted with amines, copolymers of unsaturated acids and polyolefins reacted with amines, and acid or ester functionalized hydrocarbon polymers reacted with amines, wherein the amines comprise untreated aliphatic or aromatic amines.

12. A lubricant composition comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition of the additive of claim 10.

13. A fuel composition comprising a hydrocarbyl fuel and from about 5 to about 200 pounds per thousand barrels of the composition of claim 1.

14. A lubricant additive comprising a reaction product of a treated amine and a compound selected from the group consisting of hydrocarbyl succinic anhydrides, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups, copolymers of unsaturated acids and polyolefins, and acid or ester functionalized hydrocarbon polymers, wherein the reaction product is oil soluble and has a number average molecular weight ranging from about 900 to about 50,000 as determined by gel permeation chromatography, and wherein the treated amine comprises an aliphatic or aromatic amine containing at least one primary or secondary amino group reacted with acrylonitrile or one of its homologues, followed by reduction to the primary amine.

15. The lubricant additive of claim 14, wherein the reaction product further comprises an untreated amine selected from the group consisting of aliphatic and aromatic amines.

16. The lubricant additive of claim 14, further comprising a composition selected from the group consisting of hydrocarbyl succinic anhydrides reacted with amines, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes and amines, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups reacted with amines, copolymers of unsaturated acids and polyolefins reacted with amines, and acid or ester functionalized hydrocarbon polymers reacted with amines, wherein the amines comprise untreated aliphatic or aromatic amines.

17. The lubricant additive of claim 14, wherein the reaction product is a post treated reaction product.

18. A lubricant composition comprising an oil of lubricating viscosity and from about 0.1 to 10 wt. %, based on the total weight of the lubricant composition, of the lubricant additive of claim 14.

5 19. A fuel additive comprising a reaction product of a treated amine and a compound selected from the group consisting of hydrocarbyl succinic anhydrides, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups, copolymers of unsaturated acids and polyolefins, and acid or ester
10 functionalized hydrocarbon polymers, wherein the reaction product is oil soluble and has a number average molecular weight ranging from about 900 to about 50,000 as determined by gel permeation chromatography, and wherein the treated amine comprises an aliphatic or aromatic amine containing at least one primary or secondary amino group reacted with acrylonitrile or at least one homologue thereof, followed by
15 reduction to the primary amine.

20 20. The fuel additive of claim 19, wherein the reaction product further comprises an untreated amine selected from the group consisting of aliphatic and aromatic amines.

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 21. The fuel additive of claim 19, further comprising a composition selected from the group consisting of hydrocarbyl succinic anhydrides reacted with amines, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes and amines, ethylene-propylene copolymers grafted with ethylenically
25 unsaturated carboxylic groups reacted with amines, copolymers of unsaturated acids and polyolefins reacted with amines, and acid or ester functionalized hydrocarbon polymers reacted with amines, wherein the amines comprise untreated aliphatic or aromatic amines.

30 22. The fuel additive of claim 19, wherein the reaction product is a post treated reaction product.

23. A fuel composition comprising a fuel and from about 5 to 200 pounds per thousand barrels of the lubricant additive of claim 14.

5 24. A method of lubricating moving parts of a vehicle, the method comprising using as a lubricating oil for one or more moving parts of the vehicle a lubricant composition containing a lubricant and a lubricant additive, the lubricant additive including a reaction product of a treated amine and a compound selected from the group consisting of hydrocarbyl succinic anhydrides, Mannich adducts derived from
10 hydrocarbyl-substituted phenols reacted with formaldehydes, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups, copolymers of unsaturated acids and polyolefins, and acid or ester functionalized hydrocarbon polymers, wherein the reaction product is oil soluble and has a number average molecular weight ranging from about 900 to about 50,000 as determined by gel
15 permeation chromatography, and wherein the treated amine comprises an aliphatic or aromatic amine containing at least one primary or secondary amino group reacted with acrylonitrile or a homologue thereof, followed by reduction to the primary amine.

25 25. The method of claim 24 wherein the vehicle includes an internal
20 combustion engine having a crankcase and wherein the lubricant composition comprises a crankcase oil present in the crankcase of the vehicle.

26. The method of claim 24 wherein the lubricant composition comprises a drive train lubricant present in an automotive drive train of the vehicle.

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27. The method of claim 24, wherein the reaction product includes an untreated amine selected from the group consisting of aliphatic and aromatic amines.

28. The method of claim 24, wherein the lubricant additive includes a
30 composition selected from the group consisting of hydrocarbyl succinic anhydrides reacted with amines, Mannich adducts derived from hydrocarbyl-substituted phenols

reacted with formaldehydes and amines, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups reacted with amines, copolymers of unsaturated acids and polyolefins reacted with amines, and acid or ester functionalized hydrocarbon polymers reacted with amines, wherein the amines comprise untreated
5 aliphatic or aromatic amines.

29. The method of claim 24, wherein the reaction product is a post treated reaction product.

10 30. A method for lubricating moving parts comprising contacting the moving parts with a lubricant composition containing a lubricant and a lubricant additive, the lubricant additive comprising a reaction product of a treated amine and a compound selected from the group consisting of hydrocarbyl succinic anhydrides, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes,
15 ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups, copolymers of unsaturated acids and polyolefins, and acid or ester functionalized hydrocarbon polymers, wherein the reaction product is oil soluble and has a number average molecular weight ranging from about 900 to about 50,000 as determined by gel permeation chromatography, and wherein the treated amine
20 comprises an aliphatic or aromatic amine containing at least one primary or secondary amino group reacted with acrylonitrile or a homologue thereof, followed by reduction to the primary amine.

31. The method of claim 30 wherein the lubricant composition comprises a gear
25 lubricant present in a gear box.

32. The method of claim 30, wherein the reaction product includes an untreated amine selected from the group consisting of aliphatic and aromatic amines.

30 33. The method of claim 30, wherein the lubricant additive includes a composition selected from the group consisting of hydrocarbyl succinic anhydrides

reacted with amines, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes and amines, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups reacted with amines, copolymers of unsaturated acids and polyolefins reacted with amines, and acid or ester functionalized hydrocarbon polymers reacted with amines, wherein the amines comprise untreated aliphatic or aromatic amines.

34. The method of claim 30, wherein the reaction product is a post treated reaction product.

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35. A method for decreasing combustion chamber deposits and/or intake valve deposits in an engine comprising providing a fuel containing an additive comprising a reaction product of a treated amine and a compound selected from the group consisting of hydrocarbyl succinic anhydrides, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups, copolymers of unsaturated acids and polyolefins, and acid or ester functionalized hydrocarbon polymers, wherein the reaction product is oil soluble and has a number average molecular weight ranging from about 900 to about 50,000 as determined by gel permeation chromatography, and wherein the treated amine comprises an aliphatic or aromatic amine containing at least one primary or secondary amino group reacted with acrylonitrile or a homologue thereof, followed by reduction to the primary amine.

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36. The method of claim 35, wherein the reaction product includes an untreated amine selected from the group consisting of aliphatic and aromatic amines.

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37. The method of claim 35, wherein the diesel fuel includes a composition selected from the group consisting of hydrocarbyl succinic anhydrides reacted with amines, Mannich adducts derived from hydrocarbyl-substituted phenols reacted with formaldehydes and amines, ethylene-propylene copolymers grafted with ethylenically unsaturated carboxylic groups reacted with amines, copolymers of unsaturated acids

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and polyolefins reacted with amines, and acid or ester functionalized hydrocarbon polymers reacted with amines, wherein the amines comprise untreated aliphatic or aromatic amines.

5 38. The method of claim 35, wherein the reaction product is a post treated reaction product.

 39. The lubricating composition of claim 9, wherein the composition has a sulfur content of less than 0.5 weight percent, a phosphorus content of less than 0.11
10 weight percent, and a sulfated ash content of less than 1.2 weight percent.